Assembly Resolution No. 458

BY: M. of A. Santabarbara

COMMENDING Marshall G. Jones, Ph.D. upon the occasion of his induction into the National Inventors Hall of Fame

WHEREAS, The Empire State enjoys the reputation of providing the intellectual environment and business climate necessary for encouraging the development and expansion of creative ideas and new inventions; and

WHEREAS, It is the custom of this Legislative Body to take note of and publicly acknowledge individuals who have distinguished themselves through their exemplary careers, accomplishments, and purposeful lives of service and commitment to their community and their profession; and

WHEREAS, Attendant to such concern, and in full accord with its long-standing traditions, this Legislative Body is justly proud to commend Marshall G. Jones, Ph.D. upon the occasion of his induction into the National Inventors Hall of Fame; and

WHEREAS, After a distinguished and enlightening 43-year career in the field of engineering, Marshall Jones was selected for this auspicious honor for his awe-inspiring contributions to manufacturing and industry; and

WHEREAS, A truly humble man, Marshall Jones holds over 60 United States patents, and is recognized as one of the foremost authorities in the field of laser material processing; and

WHEREAS, After graduating from Riverhead High School in 1960, Marshall Jones enrolled in Mohawk Valley Community College in Utica, New York, where he studied mechanical engineering technology; and

WHEREAS, Marshall Jones then worked at Brookhaven National Laboratory as a Draftsperson, while attending the University of Michigan where he earned his bachelor's degree; he furthered his education by obtaining both his Master of Science degree and Ph.D. from the University of Massachusetts at Amherst; and

WHEREAS, In 1974, Marshall Jones began to work as a Mechanical Engineer at General Electric (GE); in this capacity, he pioneered the use of lasers for industrial materials processing, invented novel methods to weld dissimilar metals, and developed fiber optic systems making lasers much more convenient for industrial applications; and

WHEREAS, A powerful heat source, lasers can deliver enough light energy to weld and cut metals and plastics; in the mid-1970s, Marshall Jones invented a technique using a laser to rapidly weld copper and aluminum; he later developed methods to weld other dissimilar metals including molybdenum and tungsten; and

WHEREAS, Marshall Jones initiated research and development of

fiber-optic laser-beam delivery systems resulting in a laser beam powerful enough to cut steel, titanium, and nickel-based alloys, and to weld and drill them at multiple angles; and

WHEREAS, In 1988, Marshall Jones and his team developed a laser-welding system using fiber-optic cables to simultaneously split a laser beam and heat opposite sides of a work piece; and

WHEREAS, Marshall Jones' innovative work revolutionized the method of making lead wires that is used in light bulbs; the wires are utilized in GE's production of ceramic metal halide lamps, diesel engine headliner assemblies, control rods for nuclear reactors, and flat emitters for x-ray tubes; well-known manufacturers such as Ford and Lockheed Martin have used products and hardware which resulted from GE's laser based processes; and

WHEREAS, Marshall Jones did not have an easy life; he overcame numerous obstacles to get where he is today; in 1999, he wrote of these setbacks in his memoir entitled **Never Give Up: The Marshall Jones Story;** and

WHEREAS, Each year, Marshall Jones visits fourth-graders and high school students in the Riverhead School District, impressing upon them the importance of education; his heartfelt words inspire today's young people to be tomorrow's great innovators through great diligence and hard work; and

WHEREAS, Marshall Jones often encourages students to enter fields like science, technology, engineering and mathematics; three decades ago, he helped organize a GE program which permits students to visit the facility and learn about the work its researchers do; and

WHEREAS, A pioneering role model, Marshall Jones was the recipient of numerous awards and accolades for his inventions which have changed the face of laser applications including the Innovation for Laser Applications in Manufacturing Operations; the Arthur Schawlow Award, the Laser Institute of America's highest achievement award; and the Pioneer of the Year Golden Torch Award by the National Society of Black Engineers; in addition, he was elected to the National Academy of Engineering; and

WHEREAS, The work of inventors, such as Marshall Jones, directly impacts the quality of life in New York State and the Nation; and

WHEREAS, It is the sense of this Legislative Body to pay tribute to outstanding and creative minds for their achievements and contributions, and to convey our appreciation for their ingenuity and technological advances which continue to improve our industries, health, environment, and quality of life; now, therefore, be it

RESOLVED, That this Legislative Body pause in its deliberations to commend Marshall G. Jones, Ph.D. upon the occasion of his induction into the National Inventors Hall of Fame; and be it further

RESOLVED, That a copy of this Resolution, suitably engrossed, be transmitted to Marshall G. Jones, Ph.D.